

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) An apparatus for controlling modulation of an alternating waveform on a direct current (DC) signal intended for a load, said apparatus comprising:

a DC power supply for providing a DC voltage; and

a mixing/switching circuit ~~having a first transistor and a capacitor~~ for adding a modulating signal to said DC voltage and for selectively allowing said modulated DC voltage to supply said load, wherein said mixing/switching circuit includes a first transistor, a capacitor, a resistor, and a common control signal input for controlling said adding function and said selectively allowing function.

2. cancelled

3. (presently presented) The apparatus of Claim 1, wherein said first transistor is an NPN Darlington transistor.

4. (original) The apparatus of Claim 1, wherein said mixing/switching circuit includes a second and third transistors, two resistors and two diodes for selectively allowing said modulated DC voltage to supply said load.

5. (original) The apparatus of Claim 4, wherein said second transistor is a PNP transistor and said third transistor is an NPN transistor.

6. (original) The apparatus of Claim 1, wherein said apparatus operates either in a modulation mode or in a disconnect mode.

7. (original) A low-noise block (LNB) control device capable of controlling modulation of an alternating waveform on a direct current (DC) voltage from a DC power supply to an LNB amplifier, said LNB control device comprising:

a power supply feedback line for receiving a power supply feedback signal from said DC power supply;

a power supply control line for sending a control signal to said DC power supply in response to said received power supply feedback signal;

an LNB amplifier feedback line for receiving a LNB amplifier feedback signal from said LNB amplifier; and

a modulating/switch control line for sending a modulating/switch control signal to a mixing/switching circuit in response to said received LNB amplifier feedback signal, wherein said modulating/switch control signal adds a modulating waveform to said DC voltage and selectively allows said modulated DC voltage to reach said LNB amplifier.

8. (original) The LNB control device of Claim 7, wherein said mixing/switching circuit is coupled between said DC power supply and said LNB amplifier.

9. (original) The LNB control device of Claim 8, wherein said mixing/switching circuit is configured to add a modulating signal to said DC voltage and to selectively allow said modulated DC voltage to supply said LNB amplifier, wherein said mixing/switching circuit includes a common control signal input for controlling said adding function and said selectively allowing function.

10. (original) The LNB control device of Claim 9, wherein said mixing/switching circuit includes a first transistor and a capacitor for adding said modulating signal to said DC voltage.

11. (original) The LNB control device of Claim 10, wherein said first transistor is an NPN Darlington transistor.
12. (previously presented) The LNB control device of Claim 10, wherein said mixing/switching circuit includes a second and third transistors, two resistors and two diodes for selectively allowing said modulated DC voltage to supply said load.
13. (original) The LNB control device of Claim 12, wherein said second transistor is a PNP transistor and said third transistor is an NPN transistor.
14. (original) The LNB control device of Claim 9, wherein said mixing/switching circuit operates either in a modulation mode or in a disconnect mode.